

From: [Redacted]
To: Lindsey, Deborah
Cc: [Redacted] Graybill, Eric
Subject: 48747 - Validated Electronic Data for Weirton BOP Implosion
Date: Tuesday, May 05, 2020 12:25:00 PM
Attachments: [image001.png](#)
[48747 MC8TR2 LTR.pdf](#)
[48747 MC8TR2 DVR.pdf](#)
[48747 MC8TR2 SSR.pdf](#)
[EQUIS 1 48747 MC8TR2 VAL.xls](#)
[EQUIS 2 48747 MC8TR2 VAL.xls](#)
[EQUIS 3 48747 MC8TR2 VAL.xls](#)
[EQUIS 48747 MC8TR2 VAL.xls](#)

Deborah Lindsey
US EPA Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

Dear Deborah,

Attached to this message you will find electronic files containing the validation report and validated data for the Weirton BOP Implosion site, Case # 48747, SDG MC8TR2. The validation of this case was completed by the Region III Environmental Services Assistance Team (ESAT).

Please contact ESAT's RPO, Eric Graybill by phone at 410-305-2665 or e-mail at Graybill.Eric@epa.gov if additional assistance is needed.

TO # 0002 TDF # 0320060



[Redacted] Chemistry Data Manager | 410-305-3037 |
ICF | 701 Mapes Road, Fort Meade, MD 20755-5350

[Redacted]
[Redacted]



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
Environmental Sciences Center
701 Mapes Road
Fort Meade, Maryland 20755-5350

DATE: 5/5/2020

SUBJECT: Region III Data QA Review

FROM: Eric Graybill
Region III ESAT RPO (3LS20)

Non-responsive based on revised scope
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TO: DEBORAH LINDSEY
Hazardous Site Cleanup Division (HSCD)

Attached is the data validation report for the WEIRTON BOP IMPLOSION SITE site for RAS# 48747; SDG# MC8TR2 completed by the Region III Environmental Services Assistance Team (ESAT) contractor, ICF International, under the direction of Region III LSASD.

If you have any questions regarding this review, please call Eric Graybill at (410)-305-2665.

Attachment

cc:

Non-responsive based on revised scope
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Non-responsive based on revised scope
Non-responsive based on revised scope
Non-responsive based on revised scope

TO: #0002 TDF: #0320060





ICF
ESAT Region 3
US Environmental Protection Agency Environmental Science Center
701 Mapes Road Ft. Meade, MD 20755-5350
Phone 410-305-3012

Date: May 1, 2020

To: ESAT Region 3 Project Officer

From:

Non-responsive based on revised scope
Non-responsive based on revised scope
Non-responsive based on revised scope

Non-responsive based on revised scope
Non-responsive based on revised scope

Reviewer

Subject: Inorganic Data Validation (S4VEM)
Weirton BOP Implosion
48747, MC8TR2

Overview

This data package consisted of one (1) rinsate blank analyzed for total metals by ICP-AES and mercury by cold vapor atomic absorption technique

Analysis was performed by Bonner Analytical Testing Company (BON) according to Contract Laboratory Program (CLP) Statement of Work (SOW) ISM02.4.

Data were validated according to the National Functional Guidelines for Inorganic Superfund Methods Data Review and applicable USEPA Region 3 modifications. Electronic validation was performed by the Electronic Data eXchange & Evaluation System (EXES). The validation report has been assigned the Superfund Data Validation Label Stage_3_Validation_Electronic_Manual (S3VEM).

The following validation narrative is an evaluation of laboratory reported data based on the electronic data package available through the EXES Data Manager dated March 13, 2020.

Summary

No data quality outliers or technical deficiencies were identified that would require rejection of sample results. A blank contamination issue resulted in estimated sample result for mercury.

Minor Problem

Laboratory instrumentation reported negative values for mercury (Hg) greater than absolute value of the Method Detection Limit (MDL) in blank analyses. No positive result was reported for Hg. The quantitation limit for Hg in sample MC0AD1 is estimated and qualified "UJ".

Notes

No analytes below the Contract Required Quantitation Limits (CRQLs) were detected in this sample.

Aluminum (Al), calcium (Ca), copper (Cu), silver (Ag), thallium (Tl) and zinc (Zn) have been detected in laboratory blanks associated with the sample in this SDG. Concentrations of these analytes which were less than the CRQL have been reported at the CRQL and qualified "U".

Sample number MC0AD1 was previously used by the laboratory in their LIMS as an SDG number. Per the Region, the SDG number for this case was changed to MC8TR2.

As this sample is a field quality control sample, matrix spike, laboratory duplicate, and serial dilution analyses were not performed. No data were qualified based on this finding.

Sample calculation checks were performed for all analytes in sample MC0AD1. All calculated results had RPDs less than 5% of the reported results. No sample data were qualified.

Validation qualifiers are only applied by the validator to field samples. Qualifiers may be applied by EXES electronic validation to laboratory quality control samples.

Glossary of Inorganic Data Qualifier Codes

Validation Qualifiers	In order of descending precedence. Only one of these qualifiers may apply to any result.
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R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit
B	The result is presumed a blank contaminant. This qualifier is used for drinking water samples only.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.

Sample Summary Report

Project Name: WEIRTON BOP IMPLOSION SITE
Project

GroupID: 48747/EPW14029/MC8TR2

Lab Name: Bonner Analytical Testing Co.

Sample Number: LCS01 Method: Metals by ICP-AES Matrix: Water MA Number:
Sample Location: pH: Sample Date: Sample Time:
% Moisture: % Solids:

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Spike	417		ug/L	417		1	YES	NV
Antimony	Spike	122		ug/L	122		1	YES	NV
Arsenic	Spike	20.3		ug/L	20.3		1	YES	NV
Barium	Spike	377		ug/L	377		1	YES	NV
Beryllium	Spike	9.9		ug/L	9.9		1	YES	NV
Cadmium	Spike	11.2		ug/L	11.2		1	YES	NV
Calcium	Spike	10200		ug/L	10200		1	YES	NV
Chromium	Spike	22.8		ug/L	22.8		1	YES	NV
Cobalt	Spike	109		ug/L	109		1	YES	NV
Copper	Spike	51.8		ug/L	51.8		1	YES	NV
Iron	Spike	213		ug/L	213		1	YES	NV
Lead	Spike	20.4		ug/L	20.4		1	YES	NV
Magnesium	Spike	10200		ug/L	10200		1	YES	NV
Manganese	Spike	32.4		ug/L	32.4		1	YES	NV
Nickel	Spike	78.6		ug/L	78.6		1	YES	NV
Potassium	Spike	9840		ug/L	9840		1	YES	NV
Selenium	Spike	77.2		ug/L	77.2		1	YES	NV
Silver	Spike	21.9		ug/L	21.9		1	YES	NV
Sodium	Spike	9840		ug/L	9840		1	YES	NV
Thallium	Spike	53.3		ug/L	53.3		1	YES	NV
Vanadium	Spike	110		ug/L	110		1	YES	NV
Zinc	Spike	123		ug/L	123		1	YES	NV

Sample Summary Report

Project Name: WEIRTON BOP IMPLOSION SITE Project	GroupID: 48747/EPW14029/MC8TR2	Lab Name: Bonner Analytical Testing Co.
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Sample Number: MC0AD1	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: Z	pH: 1.	Sample Date: 02/19/2020	Sample Time: 07:30:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	UJ	ug/L	0.20	U	1	YES	S4VEM

Sample Summary Report

Project Name: WEIRTON BOP IMPLOSION SITE
Project

GroupID: 48747/EPW14029/MC8TR2

Lab Name: Bonner Analytical Testing Co.

Sample Number: MC0AD1	Method: Metals by ICP-AES	Matrix: Water	MA Number:
Sample Location: Z	pH: 1.	Sample Date: 02/19/2020	Sample Time: 07:30:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	200	U	ug/L	10.5	J	1	YES	S4VEM
Antimony	Target	60.0	U	ug/L	60.0	U	1	YES	S4VEM
Arsenic	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Barium	Target	200	U	ug/L	200	U	1	YES	S4VEM
Beryllium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	S4VEM
Calcium	Target	5000	U	ug/L	38.2	J	1	YES	S4VEM
Chromium	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Cobalt	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Copper	Target	25.0	U	ug/L	1.7	J	1	YES	S4VEM
Iron	Target	100	U	ug/L	100	U	1	YES	S4VEM
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	S4VEM
Magnesium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Manganese	Target	15.0	U	ug/L	15.0	U	1	YES	S4VEM
Nickel	Target	40.0	U	ug/L	40.0	U	1	YES	S4VEM
Potassium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Selenium	Target	35.0	U	ug/L	35.0	U	1	YES	S4VEM
Silver	Target	10.0	U	ug/L	1.7	J	1	YES	S4VEM
Sodium	Target	5000	U	ug/L	5000	U	1	YES	S4VEM
Thallium	Target	25.0	U	ug/L	2.2	J	1	YES	S4VEM
Vanadium	Target	50.0	U	ug/L	50.0	U	1	YES	S4VEM
Zinc	Target	60.0	U	ug/L	0.75	J	1	YES	S4VEM

Sample Summary Report

Project Name: WEIRTON BOP IMPLOSION SITE Project	GroupID: 48747/EPW14029/MC8TR2	Lab Name: Bonner Analytical Testing Co.
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Sample Number: PBW01	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	NV

Sample Summary Report

Project Name: WEIRTON BOP IMPLOSION SITE
Project

GroupID: 48747/EPW14029/MC8TR2

Lab Name: Bonner Analytical Testing Co.

Sample Number: PBW01	Method: Metals by ICP-AES	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	10.9	J	ug/L	10.9	J	1	YES	NV
Antimony	Target	60.0	U	ug/L	60.0	U	1	YES	NV
Arsenic	Target	10.0	U	ug/L	10.0	U	1	YES	NV
Barium	Target	0.67	J	ug/L	0.67	J	1	YES	NV
Beryllium	Target	5.0	U	ug/L	5.0	U	1	YES	NV
Cadmium	Target	5.0	U	ug/L	5.0	U	1	YES	NV
Calcium	Target	5000	U	ug/L	5000	U	1	YES	NV
Chromium	Target	0.66	J	ug/L	0.66	J	1	YES	NV
Cobalt	Target	0.31	J	ug/L	0.31	J	1	YES	NV
Copper	Target	2.4	J	ug/L	2.4	J	1	YES	NV
Iron	Target	9.3	J	ug/L	9.3	J	1	YES	NV
Lead	Target	10.0	U	ug/L	10.0	U	1	YES	NV
Magnesium	Target	5000	U	ug/L	5000	U	1	YES	NV
Manganese	Target	0.72	J	ug/L	0.72	J	1	YES	NV
Nickel	Target	40.0	U	ug/L	40.0	U	1	YES	NV
Potassium	Target	5000	U	ug/L	5000	U	1	YES	NV
Selenium	Target	35.0	U	ug/L	35.0	U	1	YES	NV
Silver	Target	1.8	J	ug/L	1.8	J	1	YES	NV
Sodium	Target	5000	U	ug/L	5000	U	1	YES	NV
Thallium	Target	25.0	U	ug/L	25.0	U	1	YES	NV
Vanadium	Target	50.0	U	ug/L	50.0	U	1	YES	NV
Zinc	Target	1.6	J	ug/L	1.6	J	1	YES	NV

Sample Summary Report

Project Name: WEIRTON BOP IMPLOSION SITE
Project

GroupID: 48747/EPW14029/MC8TR2

Lab Name: Bonner Analytical Testing Co.

ESAT DATA VALIDATION EVALUATION CHECKLIST
Contract # EP-W-13-023

TDF #: 0320060	Revision: 0	Case #: 48747	SDG: MC8TR2
Site Name: Weirton BOP Implosion			
Parameter(s): TM/Hg			
Method(s): ISM02.4			
Laboratory: BON			
Reviewer: Non-responsive based on revised scope		Date Submitted to EPA: 5/5/2020	
EPA RPM/OSC: Deborah Lindsey		Number of hours spent on review: 3.5	
cc Non-responsive based on revised scope (Techlaw)		Number of Samples/Aliquots: 1/2	
Validation Level/Stage: IM2/S4VEM		EDD: YES	

<u>CRITERIA</u>	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
Format according to Region III protocol	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Clarity of report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Qualifiers applied correctly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Consistency between narrative and data summary form(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Error-free transcription	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

EFFICIENCY OF CONTRACTOR

Approval recommended for current submission	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Time spent on review is reasonable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Technical Evaluation	3.6	Non-responsive based on revised scope Non-responsive based on revised scope Non-responsive based on revised scope Non-responsive based on revised scope Non-responsive based on revised scope Non-responsive based on revised scope
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<u>ESD OVERSIGHT DATES</u>	<u>TPO</u>	<u>Oversight</u>	<u>ESAT</u>
Received at EPA	5/5/2020		
Oversight assigned	5/5/2020		
Oversight received		5/5/2020	
Oversight completed		5/5/2020	
Feedback given	5/5/2020		
Mailed to RPM			

Data Validation Checklist - Inorganics

TDF #: 0320060	Case/DAS #: 48747
Site Name: Weirton BOP Implosion	SDG #: MC8TR2
Program: <input checked="" type="checkbox"/> CLP <input type="checkbox"/> Tier IV <input type="checkbox"/> Other	DV Type: <input type="checkbox"/> Org <input checked="" type="checkbox"/> Ino <input type="checkbox"/> HiRes <input type="checkbox"/> Rad <input type="checkbox"/> Asb
Parameter: TM/Hg	DV Regional Level: IM2
SOW/Method: ISM02.4	DV Stage: S4VEM
Laboratory Code: BON	Reviewer: Non-responsive based on rev Non-responsive based on rev Non-responsive based on rev

Due Date: 5/28/20

General

CRITERIA	CHECK	COMMENTS
EPA Oversight Checklist		
TDF #	<input checked="" type="checkbox"/>	
Case #	<input checked="" type="checkbox"/>	
SDG #	<input checked="" type="checkbox"/>	
Site Name	<input checked="" type="checkbox"/>	
Laboratory	<input checked="" type="checkbox"/>	
EPA OSC/RPM	<input checked="" type="checkbox"/>	
CC: (Contractors)	<input checked="" type="checkbox"/>	
Validation Level/Stage	<input checked="" type="checkbox"/>	
Parameter	<input checked="" type="checkbox"/>	
Number of Samples/Aliquots	<input checked="" type="checkbox"/>	
Narrative		DVR- S3VEM but both checklists say S4VEM
Report Header	<input checked="" type="checkbox"/>	
Report Footer	<input checked="" type="checkbox"/>	
Overview		Fixed grammar in notes section
Laboratory	<input checked="" type="checkbox"/>	
Analytical method	<input checked="" type="checkbox"/>	
Analytical services program	<input checked="" type="checkbox"/>	
NFG reference	<input checked="" type="checkbox"/>	
Validation level	<input checked="" type="checkbox"/>	Corrected - LDP
Data package receipt date	<input checked="" type="checkbox"/>	
Criteria		
Qualifier list	<input checked="" type="checkbox"/>	
Appendix A		
Regional COC/ARF	<input checked="" type="checkbox"/>	
Appendix B		
Laboratory narrative/Excerpts	<input checked="" type="checkbox"/>	
Appendix C		
EXES report/Supplemental	<input checked="" type="checkbox"/>	

General Comments:

Reviewed By: Non-responsive based on revised scope
Non-responsive based on revised scope
Non-responsive based on revised scope _____ Date: 5/1/20

Data Validation Checklist - Inorganics

TDF #: 0320060	Case/DAS #: 48747
Site Name: Weirton BOP Implosion	SDG #: MC8TR2
Program: <input checked="" type="checkbox"/> CLP <input type="checkbox"/> Tier IV <input type="checkbox"/> Other	DV Type: <input type="checkbox"/> Org <input checked="" type="checkbox"/> Ino <input type="checkbox"/> HiRes <input type="checkbox"/> Rad <input type="checkbox"/> Asb
Parameter: TM/Hg	DV Regional Level: IM2
SOW/Method: ISM02.4	DV Stage: S4VEM
Laboratory Code: BON	Reviewer: Non-responsive based on revised scdp

Technical

Section	Check	Comments
Overview	<input checked="" type="checkbox"/>	
Matrix and # of samples	<input checked="" type="checkbox"/>	
Field QC samples	<input checked="" type="checkbox"/>	
Summary	<input checked="" type="checkbox"/>	
Major problems	<input checked="" type="checkbox"/>	none
Minor problems	<input checked="" type="checkbox"/>	Negative Hg blank
Notes	<input checked="" type="checkbox"/>	
Compounds below CRQL	<input checked="" type="checkbox"/>	
Blank contaminants	<input checked="" type="checkbox"/>	
Field Duplicates	<input checked="" type="checkbox"/>	none
Field/Rinsate Blanks	<input checked="" type="checkbox"/>	Sample is RB
Dilutions	<input checked="" type="checkbox"/>	none
Calculation	<input checked="" type="checkbox"/>	
SSRs/Form Is	<input checked="" type="checkbox"/>	
Non-Detect RLs	<input checked="" type="checkbox"/>	N / A
EDD	<input checked="" type="checkbox"/>	

DV Item	Check	Qualifier Applied	Comments
Preservation/Holding Time	<input checked="" type="checkbox"/>	None	
Instrument Performance Check	<input checked="" type="checkbox"/>	None	
Calibration	<input checked="" type="checkbox"/>	None	
Blanks	<input checked="" type="checkbox"/>	U @ CRQL	Al, Ca, Cu, Ag, Tl, Zn
Interference Check Sample	<input checked="" type="checkbox"/>	none	
Serial Dilution	<input checked="" type="checkbox"/>	None	Field QC, not performed
Lab Duplicate	<input checked="" type="checkbox"/>	None	Field QC, not performed
MS/MSDs/PDS	<input checked="" type="checkbox"/>	None	Field QC, not performed
LCS/LCSDs	<input checked="" type="checkbox"/>	None	
Internal Standards	<input checked="" type="checkbox"/>	none	
Other	<input type="checkbox"/>		

General Comments:

Reviewed By: Non-responsive based on revised scdp Date: 5/4/2020

Data Validation Report
Data Review Results

Project Name: WEIRTON BOP IMPLOSION SITE Project	GroupID: 48747/EPW14029/MC8TR2	Lab Name: Bonner Analytical Testing Co.
Submission Group Id: 31754320	Organization: EPA Region 3	SOW: ISM02.4

HoldingTimes_Preservation

NONE FOUND

Data Validation Report
Data Review Results

Project Name: WEIRTON BOP IMPLOSION SITE Project	GroupID: 48747/EPW14029/MC8TR2	Lab Name: Bonner Analytical Testing Co.
Submission Group Id: 31754320	Organization: EPA Region 3	SOW: ISM02.4

InitialCalibration

NONE FOUND

Data Validation Report
Data Review Results

Project Name: WEIRTON BOP IMPLOSION SITE Project	GroupID: 48747/EPW14029/MC8TR2	Lab Name: Bonner Analytical Testing Co.
Submission Group Id: 31754320	Organization: EPA Region 3	SOW: ISM02.4

ContinuingCalibrationVerification

NONE FOUND

Data Validation Report
Data Review Results

Project Name: WEIRTON BOP IMPLOSION SITE Project	GroupID: 48747/EPW14029/MC8TR2	Lab Name: Bonner Analytical Testing Co.
Submission Group Id: 31754320	Organization: EPA Region 3	SOW: ISM02.4

InitialCalibrationVerification

NONE FOUND

Data Review Results

Sun, 15
Mar
2020
12:52:35

Project Name: WEIRTON BOP IMPLOSION SITE Project

GroupID: 48747/EPW14029/MC8TR2

Lab Name: Bonner Analytical Testing Co.

Submission Group Id: 31754320

Organization: EPA Region 3

SOW: ISM02.4

Blanks

Method - Metals by ICP-AES

Test Name: EXES-1342

Defect Message: The following samples have analyte results less than or equal to CRQLs. The associated CCB analyte results are less than or equal to CRQLs. Detects are qualified as U. Sample results are reported at CRQLs.

Associated Samples: MC0AD1

Defective Analyte	Defective Samples/Analyses
Aluminum	MC0AD1
Calcium	MC0AD1
Copper	MC0AD1
Silver	MC0AD1
Thallium	MC0AD1
Zinc	MC0AD1

Test Name: EXES-476

Defect Message: The following samples have analyte results less than or equal to CRQLs. The associated ICB analyte results are less than or equal to CRQLs. Detects are qualified as U. Sample results are reported at CRQLs.

Associated Samples: MC0AD1

Defective Analyte	Defective Samples/Analyses
Aluminum	MC0AD1
Copper	MC0AD1
Silver	MC0AD1
Zinc	MC0AD1

Data are not qualified based on ICB.

DV 4/30/20

Test Name: EXES-478

Defect Message: The following samples have analyte results greater than CRQLs. The associated ICB analyte results are less than or equal to CRQLs. Use Professional Judgement to qualify detects.

Associated Samples: LCS01

Data Review Results

Sun, 15
Mar
2020
12:52:35

Project Name: WEIRTON BOP IMPLOSION SITE Project

GroupID: 48747/EPW14029/MC8TR2

Lab Name: Bonner Analytical Testing Co.

Submission Group Id: 31754320

Organization: EPA Region 3

SOW: ISM02.4

Defective Analyte	Defective Samples/Analyses
Aluminum	LCS01
Barium	LCS01
Beryllium	LCS01
Chromium	LCS01
Cobalt	LCS01
Copper	LCS01
Iron	LCS01
Manganese	LCS01
Nickel	LCS01
Potassium	LCS01
Silver	LCS01
Zinc	LCS01

Test Name: EXES-479**Defect Message: The following samples have analyte results greater than CRQLs. The associated CCB analyte results are less than or equal to CRQLs. Use Professional Judgement to qualify detects.****Associated Samples: LCS01**

Defective Analyte	Defective Samples/Analyses
Aluminum	LCS01
Antimony	LCS01
Barium	LCS01
Calcium	LCS01
Chromium	LCS01
Cobalt	LCS01
Copper	LCS01
Iron	LCS01
Magnesium	LCS01
Manganese	LCS01
Potassium	LCS01
Silver	LCS01
Sodium	LCS01
Thallium	LCS01
Zinc	LCS01

Data Review Results

Sun, 15
Mar
2020
12:52:35

Project Name: WEIRTON BOP IMPLOSION SITE Project

GroupID: 48747/EPW14029/MC8TR2

Lab Name: Bonner Analytical Testing Co.

Submission Group Id: 31754320

Organization: EPA Region 3

SOW: ISM02.4

Test Name: EXES-506**Defect Message:** The following samples have analyte results less than or equal to CRQLs. The associated PB analyte results are less than or equal to CRQLs. Detects are qualified as U. Sample results are reported at CRQLs.**Associated Samples: MC0AD1**

Defective Analyte	Defective Samples/Analyses
Aluminum	MC0AD1
Copper	MC0AD1
Silver	MC0AD1
Zinc	MC0AD1

Method - Mercury by Cold Vapor

Test Name: EXES-480**Defect Message:** The following samples are associated with CCB that has analyte results less than or equal to (-MDLs) but greater than or equal to (-CRQLs). Use Professional Judgement to qualify detects and nondetects.**Associated Samples: MC0AD1**

Defective Analyte	Defective Samples/Analyses
Mercury	MC0AD1

ND is qualified "UJ".**DV 4/30/20****Test Name: EXES-481****Defect Message:** The following samples are associated with ICB that has analyte results less than or equal to (-MDLs) but greater than or equal to (-CRQLs). Use Professional Judgement to qualify detects and nondetects.**Associated Samples: MC0AD1**

Defective Analyte	Defective Samples/Analyses
Mercury	MC0AD1

Data Validation Report
Data Review Results

Project Name: WEIRTON BOP IMPLOSION SITE Project	GroupID: 48747/EPW14029/MC8TR2	Lab Name: Bonner Analytical Testing Co.
Submission Group Id: 31754320	Organization: EPA Region 3	SOW: ISM02.4

InterferenceCheckSample

NONE FOUND

Data Validation Report
Data Review Results

Project Name: WEIRTON BOP IMPLOSION SITE Project	GroupID: 48747/EPW14029/MC8TR2	Lab Name: Bonner Analytical Testing Co.
Submission Group Id: 31754320	Organization: EPA Region 3	SOW: ISM02.4

LaboratoryControlSample

NONE FOUND

Data Validation Report
Data Review Results

Project Name: WEIRTON BOP IMPLOSION SITE Project	GroupID: 48747/EPW14029/MC8TR2	Lab Name: Bonner Analytical Testing Co.
Submission Group Id: 31754320	Organization: EPA Region 3	SOW: ISM02.4

MatrixSpikes

NONE FOUND

Data Validation Report
Data Review Results

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Submission Group Id: 31754320	Organization: EPA Region 3	SOW: ISM02.4

SerialDilution

NONE FOUND

Data Review Results

Sun, 15
Mar
2020
12:52:35

Project Name: WEIRTON BOP IMPLOSION SITE Project

GroupID: 48747/EPW14029/MC8TR2

Lab Name: Bonner Analytical Testing Co.

Submission Group Id: 31754320

Organization: EPA Region 3

SOW: ISM02.4

TargetAnalyteQuantitation

Method - Metals by ICP-AES

Test Name: EXES-790

Defect Message: The following samples have analyte results greater than or equal to detection limit (MDL) and below quantitation limit (CRQL). Detects are qualified as estimated J.

Associated Samples: MC0AD1, PBW01

Defective Analyte	Defective Samples/Analyses
Aluminum	MC0AD1, PBW01
Barium	PBW01
Calcium	MC0AD1
Chromium	PBW01
Cobalt	PBW01
Copper	MC0AD1, PBW01
Iron	PBW01
Manganese	PBW01
Silver	MC0AD1, PBW01
Thallium	MC0AD1
Zinc	MC0AD1, PBW01

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Duplicates

NONE FOUND

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Submission Group Id: 31754320	Organization: EPA Region 3	SOW: ISM02.4

SampleAnalysis

NONE FOUND

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029
Lab Code: BON Case No.: 48747 MA No.: _____ SDG No.: MC8TR2
SOW No.: ISM02.4

EPA Sample No.	Lab Sample ID	ICP-AES	Analysis Method		
			ICP-MS	Mercury	Cyanide
<u>MC0AD1</u>	<u>2002281-01</u>	<u>X</u>	<u> </u>	<u>X</u>	<u> </u>

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the SDG narrative. Release of the data contained in this hardcopy Complete SDG File and in the electronic data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Non-responsive based on revised scope Name: Non-responsive based on revised scope
Non-responsive based on revised scope
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Non-responsive based on revised scope
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Non-responsive based on revised scope
Non-responsive based on revised scope
Non-responsive based on revised scope
Non-responsive based on revised scope
Non-responsive based on revised scope
Date: _____ Title: President

SDG Narrative

Contract Number: EPW14029

Laboratory Code: BON

Work Order No.: 2002281

SOW: ISM02.4

Client: Environmental Protection Agency, Region 3

Case No.: 48747

SDG No.: MC8TR2

Modified Analysis No.: NA

Sample Receipt

On February 24, 2020 we received 19 soils and 1 water via FedEx air bill 7778 1809 7875. Custody seals were present and intact. Cooler temp was determined to be 3 degrees C. Samples were in good condition except for the following discrepancies.

Laboratory problems

Issue 1: All sample IDs listed on the COC have already been used in the laboratory's LIMS as SDG IDs, and cannot be reused. The laboratory would like two new SDG IDs for the soil and water samples.

Resolution 1: Per Region 3, the laboratory will use SDG IDs MC8TR1 and MC8TR2 for the received soil and water samples. Please note the issue in the SDG Narrative and proceed with the analysis of the samples.

Insufficient/inappropriate designation of laboratory QC

Issue 2: Laboratory QC is scheduled for all water samples for this Case; however, the one water sample received was a rinse blank. The laboratory would like to confirm that they may proceed without QC for this sample.

Resolution 2: Per Region 3, the laboratory may proceed with the sample without performing laboratory QC. Please note the issue in the SDG Narrative and proceed with the analysis of the samples.

Analysis = TM by ICP-AES/Hg

Sample Tags are present.

Laboratory Instrumentation Disclosure

Raw data ppb/ppm concentrations reflect any and all correction(s) applied. Corrections factors are applied to ICP-AES & ICP-MS raw data and background correction(s) are applied to ICP-AES, HG & CN raw data. ICP-MS evaluates the following analyte masses by collision cell (CCT) using 7% hydrogen gas balanced with helium: 51V, 52Cr, 53Cr, 54Fe, 55Mn, 75-77As, 77-82Se, 150Sm, 156Gd, 160Dy & 164Er. ICP-MS internal standards are evaluated in standard and CCT mode (CCT exception: 115In). All MDLs are reported using U.S. Government Printing Office, 40 Code of Federal Regulations, Part 136, Section 1, Appendix B, Revision 1.

Correction of Nonconformity & Corrective Action Issues

Batch & Analysis Information for ICPAES: No discrepancies

Batch & Analysis Information for Mercury: No discrepancies

Sample Calculation for Aluminum on ICAPP02:

Analysis: ISM024 - ICPAES (TM)

Batch ID: B0C0521

Sequence ID: S0C0605

ICAL ID: D20C017

Lab ID: 2002281-01

EPA ID: MC0AD1

Date/Time Analyzed: 3/6/20 11:17

Concentration: $10.486 \text{ ug/L} \times (50.0 \text{ mL}/50.0 \text{ mL}) \times 1 \text{ DF} = 10.486 \Rightarrow 10.5 \text{ ug/L}$

Does the Data Reviewer contest to the accuracy and precision of the sample calculation with respect to the raw data and Form 1(s)?

☒ YES ☐ NO

2703 Oak Grove Road, Hattiesburg, MS 39402

Phone No.: (601) 264.2854 Fax No.: (601) 268.7084

Contract Number: EPW14029

Laboratory Code: BON

Work Order No.: 2002281

SOW: ISM02.4

Client: Environmental Protection Agency, Region 3

Case No.: 48747

SDG No.: MC8TR2

Modified Analysis No.: NA

Sample Calculation for Mercury on CETAC02:

Analysis: ISM024 - Mercury

Batch ID: B0C0522

Sequence ID: S0C1002

ICAL ID: D20C022

Lab ID: 2002281-01

EPA ID: MC0AD1

Date/Time Analyzed: 3/6/20 16:31

Concentration: $0.005 \text{ ug/L} \times (50.0 \text{ mL}/50.0 \text{ mL}) \times 1 \text{ DF} = 0.005 \Rightarrow \text{ND ug/L}$

Does the Data Reviewer contest to the accuracy and precesion of the sample calculation with respect to the raw data and Form 1(s)?

YES or NO

Non-responsive based on revised scope
Non-responsive based on revised scope
Non-responsive based on revised scope

Metals Department Validator(s)

Date

3/10/20

Non-responsive based on revised scope
Non-responsive based on revised scope
Non-responsive based on revised scope
Non-responsive based on revised scope
Non-responsive based on revised scope

Data Validator(s)

Date

3/10/20

By signing and dating, metal department validator(s) and data validator(s) certify that all handwritten and electronic paperwork are compliant with the SOW and the analysis portion of the SDG narrative reflects all materials submitted in the Complete SDG File hardcopy, both technically and for completeness.